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EXAMINER
HUNTSINGER, PETER K

ART UNIT	PAPER NUMBER
2625	

DATE MAILED: 09/22/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/922,521

Applicant(s)

JERAN ET AL.

Examiner

Peter K. Huntsinger

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 14 June 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-9, 11-18 and 20-31 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-7, 11-18, 20-25 and 28 is/are rejected.
- 7) ☒ Claim(s) 8, 9, and 29-31 is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date _____.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____.

DETAILED ACTION

Response to Arguments

1. Applicant's arguments filed 6/14/06 have been fully considered but they are not persuasive.

The applicant argues on pages 9-18 of the response in essence that:

Brot et al. do not teach that data is downloaded based upon whether the data is compatible with printing capabilities of the printer.

- a. Brot et al. disclose identifying the type of cartridge of the printer, and then selecting the appropriate data to send for the cartridge to the printer (col. 2-3, lines 62-67, 1-12). The identification of the printer cartridge determines whether the data is compatible with printing capabilities of the printer.

The applicant argues on pages 9-18 of the response in essence that:

The data that is downloaded in Brot et al. is settings for the printer cartridge and not pertaining to print characteristics.

- b. According to the definition within the art, a characteristic is a definable or measurable feature of a process, product, or variable. A setting would therefore be a definable variable, and thus can be considered a print characteristic.

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

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3. Claim 14 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The term "substantially equivalent" in claim 14 is a relative term which renders the claim indefinite. The term "substantially equivalent" is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention.

4. Claims 16-18 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. The independent claim 13 states "wherein the second set of printing characteristics comprises finishing parameters." The claims 16-18 state wherein the second set of printing characteristics comprises a color table and/or a dithering algorithm. A color table and a dithering algorithm are not finishing parameters. The examiner suggests amending claim 13 to state "wherein the second set of printing characteristics include finishing parameters."

Claim Rejections - 35 USC § 102

5. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States

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only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

6. Claims 22-25 are rejected under 35 U.S.C. 102(e) as being anticipated by Brot et al. U.S. Patent 6,522,348.

Referring to claim 22, Brot et al. disclose a flexible printing system comprising: a printer comprising: memory that stores updateable printing characteristics (col. 2, lines 43-50); and a print characteristics transfer mechanism (col. 2, lines 57-61); a network connection that enables the printer to access a network (col. 2-3, lines 62-67, 1-5); and a printer data memory that stores a uniform resource locator, the printer data memory coupled to the print characteristics transfer mechanism in order to transfer the uniform resource locator to the printer (col. 2-3, lines 62-67, 1-5), wherein the printer is configured to download data from a web site corresponding to the URL if the data is compatible with printing capabilities of printer (col. 2-3, lines 66-67, 1-11). The call number of the server as disclosed by Brot et al., which serves as an address, reads on the claimed universal resource locator.

Referring to claim 23, Brot et al. disclose the system of claim 22 wherein the network connection comprises a modem that is coupled to the public switched telephone network (col. 2-3, lines 62-67, 1-5).

Referring to claim 24, Brot et al. disclose the system of claim 22 wherein the network connection comprises a computer having Internet access capabilities (col. 2-3, lines 62-67, 1-5).

Referring to claim 25, Brot et al. disclose the system of claim 22 wherein the network is the Internet (col. 2-3, lines 62-67, 1-5).

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 1, 4-7, and 28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cook Patent 6,155,664, and further in view of Bullock et al. Patent 5,835,817.

Referring to claim 1, Cook discloses a flexible printing system comprising: a printer comprising memory that stores a set of updateable print characteristics and a print characteristics transfer mechanism (printhead cartridge memory device 12 of Fig. 1, col. 6, lines 28-32); and a printer consumable comprising memory that stores a set of print characteristics (remote ink cartridge memory device 14 of Fig. 1, col. 6, lines 60-66), the printer consumable coupled to the print characteristics transfer mechanism in order to update the set of updateable print characteristics in the printer memory (col. 11, lines 11-12, lines 65-67, 1-7) if the print characteristics are compatible with the printing capabilities of the printer (col. 9, lines 58-67). Cook does not disclose expressly finishing process characteristics. Bullock et al. disclose updateable characteristics include finishing processes (col. 5, lines 14-22). Cook and Bullock et al. are combinable because they are from the same field of consumable printer memory. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to allow the

printing system of Cook to include finishing process characteristics. The motivation for doing so would have been to include a liquid to finish a sheet of paper in the reservoir of Cook. Therefore, it would have been obvious to combine Bullock et al. with Cook to obtain the invention as specified in claim 1.

Referring to claim 4, Cook discloses wherein the memory comprises semiconductor memory and the transfer mechanism comprises electrical contacts that transfer electrical signals from the memory to the printer (col. 6, lines 28-48).

Referring to claim 5, Cook discloses wherein the memory comprises magnetic memory and the transfer mechanism comprises a magnetic data reader for reading the magnetic memory (col. 6, lines 28-48).

Referring to claim 7, Cook discloses wherein the updateable print characteristics are replaced by the print characteristics stored in the print consumable memory (col. 11, lines 11-12, lines 65-67, 1-7).

Referring to claim 28, Cook discloses a printer cartridge apparatus having a capability for printing on media and updating printing characteristics of a printer, the apparatus comprising: memory that stores printing characteristics for use by the printer (printhead cartridge memory device 12 of Fig. 1, col. 6, lines 28-32); means for transferring the printing characteristics to the printer, the means coupled to the memory, wherein the printer is configured to update printing characteristics of the printer (col. 11, lines 11-12, lines 65-67, 1-7) with printing characteristics of the printing cartridge apparatus (remote ink cartridge memory device 14 of Fig. 1, col. 6, lines 60-66) if the printing characteristics of the printer cartridge apparatus is compatible with printing

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capabilities of the printer (col. 9, lines 58-67); and means for printing on the media.

Hirst et al. do not disclose expressly finishing process characteristics. Cook does not disclose expressly finishing process characteristics. Bullock et al. disclose updateable characteristics include finishing processes (col. 5, lines 14-22). Cook and Bullock et al. are combinable because they are from the same field of consumable printer memory. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to allow the printing system of Cook to include finishing process characteristics. The motivation for doing so would have been to include a liquid to finish a sheet of paper in the reservoir of Cook. Therefore, it would have been obvious to combine Bullock et al. with Cook to obtain the invention as specified in claim 28.

9. Claims 2, 12 and 13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cook Patent 6,155,664 and Bullock et al. Patent 5,835,817 as applied to claim 1 above, and further in view of Wheeler et al. Patent 6,467,888.

Referring to claim 2, Cook discloses semiconductor memory (col. 6, lines 28-48) but do not disclose expressly using a radio frequency transfer mechanism. Wheeler et al. disclose the transfer mechanism comprises a radio frequency receiver that transfers the set of print characteristics from the memory over a radio frequency link (col. 13, lines 50-67). Cook and Wheeler et al. are combinable because they are from the same field of consumable printer memory. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to allow the printing system of Cook to transfer information using radio frequency as disclosed by Wheeler et al. The

motivation for doing so would have been to allow the printer memory and the consumable memory to transfer information wirelessly. Further, the data transfer method of RFID is well known in the art and simply a generic data transfer method. Therefore, it would have been obvious to combine Wheeler et al. with Cook to obtain the invention as specified in claim 2.

Referring to claim 12, Cook discloses a flexible printing system comprising: a printer comprising programmable memory that stores updateable print characteristics (printhead cartridge memory device 12 of Fig. 1, col. 6, lines 28-32) after making a determination that the print characteristics are compatible with the printing capabilities of the printer (col. 9, lines 58-67); and a printer consumable comprising memory that stores a set of printer characteristics (remote ink cartridge memory device 14 of Fig. 1, col. 6, lines 60-66). Cook does not disclose expressly using a radio receiver or transmitter. Wheeler et al. disclose a radio frequency receiver and a radio frequency transmitter that transmits the printer characteristics to the radio frequency receiver (col. 8-9, lines 60-67, 1-3). Cook and Wheeler et al. are combinable because they are from the same field of consumable printer memory. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to allow the printing system of Cook to transfer information using radio frequency as disclosed by Wheeler et al. The motivation for doing so would have been to allow the printer memory and the consumable memory to transfer information wirelessly. Further, the data transfer method of RFID is well known in the art and simply a generic data transfer method. Cook do not disclose expressly finishing process characteristics. Cook does not

disclose expressly the characteristics include finishing processes. Bullock et al. disclose updateable characteristics include finishing processes (col. 5, lines 14-22). Cook and Bullock et al. are combinable because they are from the same field of consumable printer memory. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to allow the printing system of Cook to include finishing process characteristics. The motivation for doing so would have been to include a liquid to finish a sheet of paper in the reservoir of Cook. Therefore, it would have been obvious to combine Bullock et al. and Wheeler et al. with Cook to obtain the invention as specified in claim 12.

Referring to claim 13, Cook discloses a method for updating printing characteristics in a printing system comprising a printer and a first set of printing characteristics (printhead cartridge memory device 12 of Fig. 1, col. 6, lines 28-32) and printer data memory that stores a second set of printing characteristics (remote ink cartridge memory device 14 of Fig. 1, col. 6, lines 60-66), the method comprising the steps of: the printer querying the printer data memory (col. 7-8, lines 66-67, 1-6); and updating the printer with the second set of printing characteristics (col. 11, lines 11-12, lines 65-67, 1-7) after making a determination that the print characteristics are compatible with the printing capabilities of the printer (col. 9, lines 58-67). Cook does not disclose expressly using a radio receiver or transmitter. Wheeler et al. disclose a radio frequency receiver and a radio frequency transmitter that transmits the printer characteristics to the radio frequency receiver (col. 8-9, lines 60-67, 1-3). Cook and Wheeler et al. are combinable because they are from the same field of consumable

printer memory. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to allow the printing system of Cook to transfer information using radio frequency as disclosed by Wheeler et al. The motivation for doing so would have been to allow the printer memory and the consumable memory to transfer information wirelessly. Further, the data transfer method of RFID is well known in the art and simply a generic data transfer method. Cook do not disclose expressly finishing process characteristics. Cook does not disclose expressly the characteristics include finishing processes. Bullock et al. disclose updateable characteristics include finishing processes (col. 5, lines 14-22). Cook and Bullock et al. are combinable because they are from the same field of consumable printer memory. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to allow the printing system of Cook to include finishing process characteristics. The motivation for doing so would have been to include a liquid to finish a sheet of paper in the reservoir of Cook. Therefore, it would have been obvious to combine Bullock et al. and Wheeler et al. with Cook to obtain the invention as specified in claim 13.

Referring to claim 13, Cook discloses the step of if the second set of printing characteristics is incompatible with capabilities of the printer the printer using the first set of printing characteristics (col. 7-8, lines 66-67, 1-6).

10. Claims 3 and 6 are rejected under 35 U.S.C. 103(a) as being unpatentable over Cook Patent 6,155,664 and Bullock et al. Patent 5,835,817 as applied to claims 1 and above, and further in view of Arthur et al. Patent 5,049,898.

Referring to claim 3, Cook discloses printer consumable memory but does not disclose expressly optical memory. Arthur et al. disclose the memory comprises optical memory and the transfer mechanism comprises a laser for reading the optical memory (col. 3, lines 4-9). Cook and Arthur et al. are combinable because they are from the same field of consumable printer memory. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to allow the printing system of Cook to read optical memory. The motivation for doing so would have been the lower cost of using optical memory. Further, optical memory is well known in the art and a common way to encode data. Therefore, it would have been obvious to combine Arthur et al. with Cook to obtain the invention as specified in claim 3.

Referring to claim 6, Cook discloses printer consumable memory but do not disclose expressly magnetic memory. Arthur et al. disclose a bar code and the transfer mechanism comprises a laser scanner that scans the bar code and transfers the scanned data to the printer (col. 6, lines 34-38). Cook and Arthur et al. are combinable because they are from the same field of consumable printer memory. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to allow the printing system of Cook to read bar codes. The motivation for doing so would have been the lower cost of printing bar codes. Further, bar codes are well known in the art and a common way to encode data. Therefore, it would have been obvious to combine Arthur et al. with Cook to obtain the invention as specified in claim 6.

11. Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Cook Patent 6,155,664 and Bullock et al. Patent 5,835,817 as applied to claim 1 above, and further in view of Fotland Patent 6,008,827.

Referring to claim 11, Bullock et al. disclose finishing process characteristics but do not disclose expressly a matte finish, a glossy finish, a satin finish, and finishes with varied surface roughness. Fotland discloses a matte finish, a glossy finish, a satin finish, and finishes with varied surface roughness (col. 5, lines 7-13). Cook and Fotland are combinable because they are from the same field of printing systems. At the time of the invention, it would have been obvious to utilize different finishes. The motivation for doing so would have been to provide different options for a printed sheet based on individual preference. Further, these are simply generic types of finishes. Therefore, it would have been obvious to combine Fotland with Cook to obtain the invention as specified in claim 11.

12. Claim 20 is rejected under 35 U.S.C. 103(a) as being unpatentable over Cook Patent 6,155,664, and further in view of Brot et al. Patent 6,522,348 and Bullock et al. Patent 5,835,817.

Referring to claim 20, Cook discloses a method for updating printing characteristics in a printing system comprising a printer and a first set of printing characteristics (printhead cartridge memory device 12 of Fig. 1, col. 6, lines 28-32) and a memory that stores a second set of printing characteristics (remote ink cartridge memory device 14 of Fig. 1, col. 6, lines 60-66), the method comprising the steps of: the

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printer reading the second set of printing characteristics; if the second set of printing characteristics are different from the first set of printing characteristics, the printer retrieving the second set of printing characteristics (col. 7-8, lines 66-67, 1-6); and if the second set of printing characteristics are compatible with printing capabilities of the printer (col. 9, lines 58-67), updating the first set of printing characteristics with the second set of printing characteristics (col. 11, lines 11-12, lines 65-67, 1-7). Cook does not disclose expressly utilizing a data card with printer characteristics. Brot et al. disclose a data card with print characteristics (col. 2, lines 10-16); and coupling the data card to the card reader (col. 2, lines 57-61). Cook and Brot et al. are combinable because they are from the same field of consumable printer memory. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to allow the printing system of Cook to transfer information using a data card. The motivation for doing so would have been to provide the convenience of the widely used data card system used in most digital cameras. Further, the data card is well known in the art and simply a generic type of storage and transfer medium. Cook does not disclose expressly finishing process characteristics. Bullock et al. disclose updateable characteristics include finishing processes (col. 5, lines 14-22). Cook and Bullock et al. are combinable because they are from the same field of consumable printer memory. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to allow the printing system of Cook to include finishing process characteristics. The motivation for doing so would have been to include a liquid to finish a sheet of

paper in the reservoir of Cook. Therefore, it would have been obvious to combine Brot et al. and Bullock et al. with Cook to obtain the invention as specified in claim 20.

13. Claim 21 is rejected under 35 U.S.C. 103(a) as being unpatentable over Cook Patent 6,155,664, and further in view of Brot et al. Patent 6,522,348.

Referring to claim 21, Cook discloses a method for updating printing characteristics in a printing system comprising a printer and a first set of printing characteristics (printhead cartridge memory device 12 of Fig. 1, col. 6, lines 28-32) and a memory that stores a second set of printing characteristics (remote ink cartridge memory device 14 of Fig. 1, col. 6, lines 60-66), the method comprising the steps of: the printer reading the second set of printing characteristics; if the second set of printing characteristics are different from the first set of printing characteristics and the printer is capable of using the printing characteristics, the printer retrieving the second set of printing characteristics (col. 7-8, lines 66-67, 1-6); and if the second set of printing characteristics are compatible with printing capabilities of the printer (col. 9, lines 58-67), the printer retrieving the second set of printing characteristics; and if the second set of printing characteristics are compatible with the printing capabilities of the printer (col. 9, lines 58-67), updating the first set of printing characteristics with the second set of printing characteristics (col. 11, lines 11-12, lines 65-67, 1-7). Cook does not disclose expressly utilizing a data card with printer characteristics. Brot et al. disclose a data card with print characteristics (col. 2, lines 10-16); and coupling the data card to the card reader (col. 2, lines 57-61). Cook and Brot et al. are combinable because they are

from the same field of consumable printer memory. At the time of the invention, it would have been obvious to a person of ordinary skill in the art to allow the printing system of Cook to transfer information using a data card. The motivation for doing so would have been to provide the convenience of the widely used data card system used in most digital cameras. Further, the data card is well known in the art and simply a generic type of storage and transfer medium. Therefore, it would have been obvious to combine Brot et al. with Cook to obtain the invention as specified in claim 21.

Allowable Subject Matter

14. Claims 26 and 27 are allowed.

15. Claims 8, 9, and 29-31 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

Conclusion

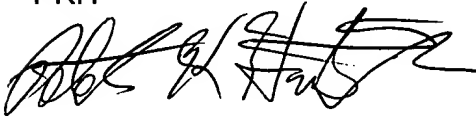

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Peter K. Huntsinger whose telephone number is (571)272-7435. The examiner can normally be reached on Monday - Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kimberly Williams can be reached on (571)272-7471. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

PKH

A handwritten signature in black ink, appearing to be 'PKH' with stylized flourishes.A handwritten signature in black ink, appearing to be 'K. Y. POON' with stylized flourishes.

KING Y. POON
PRIMARY EXAMINER